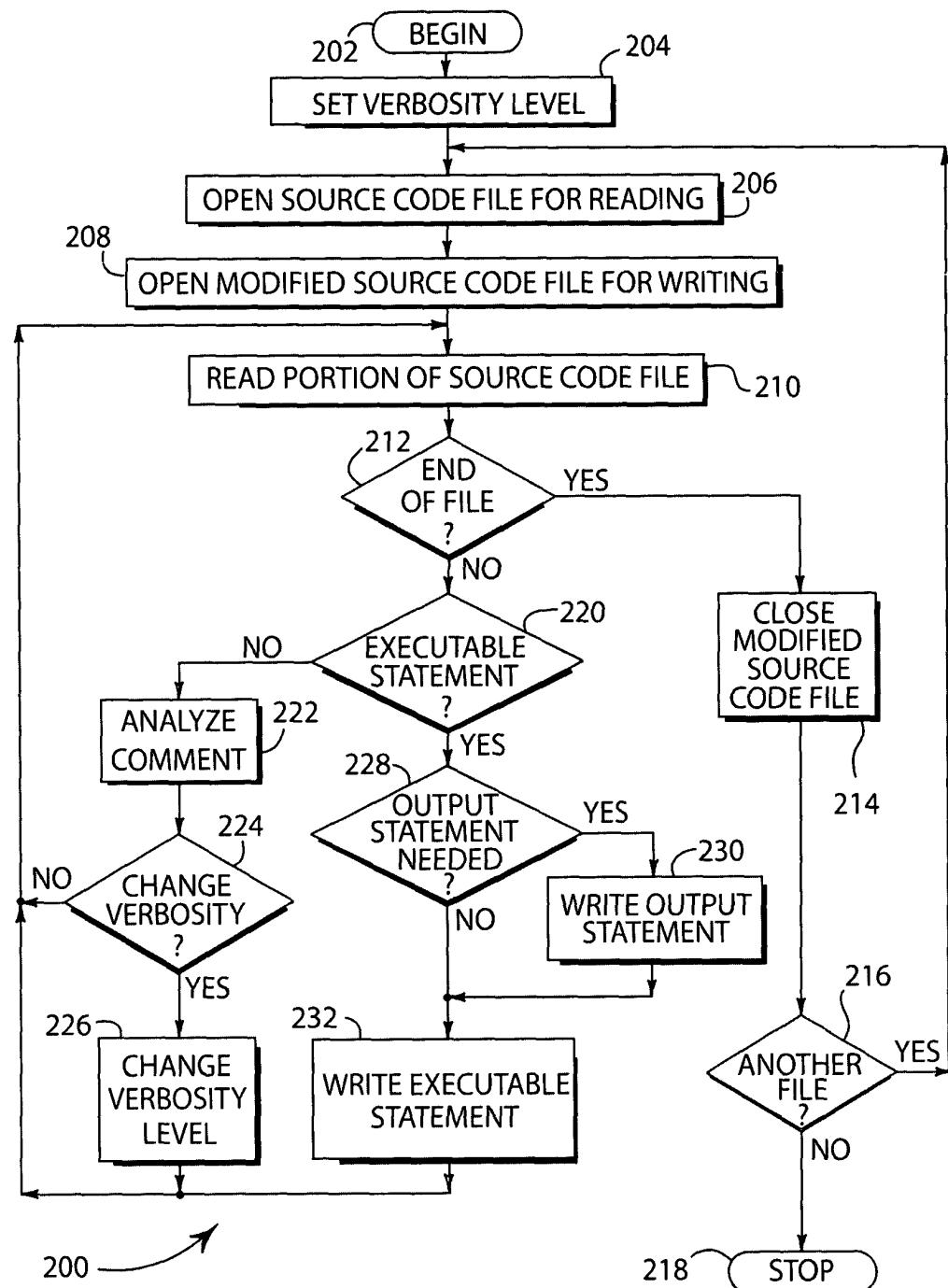


**FIGURE 1**



200  
 METHOD FOR  
 ANNOTATING  
 SOURCE CODE

**FIGURE 2**

300  
 SOURCE CODE

```

int main( int argc, char *argv[] ) {
    int inside_comment = 0, trace_declared = 0, trace_opened = 0;
    int i, n;
    char file_name[MAX_LINE_LEN];
    FILE *infile, *outfile;
    char save_dir[MAX_LINE_LEN];

    if( !(argc == 4) ) {
        printf("Usage: codetracer <input path> <output path> <file spec>\n");
        testdir outdir *.cpp\n");
        printf("or\n\nncodetracer this outdir *.cpp\n");
        exit( 0 );
    }
    else {
        printf( "Program codetracer version %s\n", VERSION );
    }
    // save path of the directory where we start
    if ( _getcwd( save_dir, _MAX_PATH ) == NULL ) {
        printf( "Could not find path of current directory\n" );
        exit( -2 );
    }
    ..etc.
}
  
```

**FIGURE 3**

```

FILE *trace;
// <<<< This line is inserted by the tool

int main( int argc, char *argv[] ) {
    trace = fopen( "trace.txt", "wt" ); // <<<< This line is inserted by the tool
    fprintf(trace,"codetracer.cpp 0028: int main( int argc, char *argv[] ) {\n");
    fprintf(trace,"codetracer.cpp 0029:     int inside_comment = 0, trace_declared = 0 ,\n";
    trace_opened = 0; \n");
    int inside_comment = 0, trace_declared = 0, trace_opened = 0;
    fprintf(trace,"codetracer.cpp 0030:     int i, n;\n";
    fprintf(trace,"codetracer.cpp 0031:     char file_name[MAX_LINE_LEN];\n";
    fprintf(trace,"codetracer.cpp 0032:     FILE *infile, *outfile;\n";
    FILE *infile, *outfile;
    fprintf(trace,"codetracer.cpp 0033:     char save_dir[MAX_LINE_LEN];\n";
    char save_dir[MAX_LINE_LEN];
    fprintf(trace,"codetracer.cpp 0035:     if( !(argc == 4) ) {\n";
    if( !(argc == 4) {
        printf("Usage: codetracer <input path> <output path> <file spec>\n");
        testdir outdir *.cpp\n";
        printf("or\n");
        fprintf(trace,"codetracer this outdir *.cpp\n");
        exit( 0 );\n");
    }
    else {
        fprintf(trace,"codetracer.cpp 0040:     else {\n";
        printf( "Program codetracer version %s\n", VERSION );
    }
    fprintf(trace,"codetracer.cpp 0043:     // save path of the directory where we start\n");
    // save path of the directory where we start
    fprintf(trace,"codetracer.cpp 0044:     if( __getcwd( save_dir, _MAX_PATH ) == NULL ) {\n";
    (\n");
    if( __getcwd( save_dir, _MAX_PATH ) == NULL ) {
        printf( "Could not find path of current directory\n" );
        fprintf(trace,"codetracer.cpp 0046:     exit( -2 );\n");
        exit( -2 );
    }
    .etc.

```

400  
 ANNOTATED  
 SOURCE CODE

**FIGURE 4**

## FIGURE 5